

IN THE CLAIMS:

The text of all pending claims is set forth below. Please AMEND claims 1 and 3 and ADD claim 8 in accordance with the following:

1. (CURRENTLY AMENDED) A resin bonded rare earth magnet, compression molded from a rare earth-transition metal alloy powder and a powdered thermosetting resin, comprising:

a magnet body comprising magnetic particles obtained by a mixture of the thermosetting resin and the rare earth-transition metal alloy powder with a particle size of between 20 and 300 microns;

a filling material with a particle size between 0.1 and 15 microns used to fill in depressions between the powdered magnetic particles on a surface of said magnet which is mixed with particles of the powdered thermosetting resin, and directly filled and cured in the depressions such that the surface has a surface roughness of less than 3 microns, and fixed with said thermosetting resin; and

a corrosion inhibiting coat made from a synthetic resin applied to the surface of said magnet.

2. (PREVIOUSLY PRESENTED) A resin bonded rare earth magnet according to Claim 1, wherein the corrosion inhibiting coat made from synthetic resin applied to the surface of said magnet has a thickness of between 1 and 30 microns.

3. (CURRENTLY AMENDED) A resin bonded rare earth magnet, comprising:  
a magnet body;  
a filling material to directly fill in depressions on the magnet body such that a surface of the magnet body has a surface roughness of less than 3 microns; and  
a synthetic resin coat applied to an outer surface of said magnet body.

4. (PREVIOUSLY PRESENTED) The resin bonded rare earth magnet according to claim 3, wherein the filling material smooths the depressions on the magnet body.

5. (PREVIOUSLY PRESENTED) The resin bonded rare earth magnet according to claim 3, wherein the synthetic resin coat is a corrosion inhibiting coat.

6. (PREVIOUSLY PRESENTED) The resin bonded rare earth magnet according to claim 3, wherein a surface of the synthetic resin coat has a surface roughness of less than 3 microns.

7. (PREVIOUSLY PRESENTED) The resin bonded rare earth magnet according to claim 3, wherein the filling material directly fills in the depressions.

8. (NEW) A method of forming a resin bonded rare earth magnet, comprising:  
providing a magnet body comprising mixing a thermosetting resin and particles of a rare earth-transition metal alloy powder having a particle size between 20 and 300 microns; and  
directly filling a filling material with a particle size between 0.1 and 15 microns in depressions between the particles of the metal alloy powder such that the surface has a surface roughness of less than 3 microns.